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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,521	10/19/2001	Wilf Koenders	0100024	6872
26874	7590	04/29/2005	EXAMINER	
FROST BROWN TODD, LLC 2200 PNC CENTER 201 E. FIFTH STREET CINCINNATI, OH 45202			PRONE, JASON D	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/032,521	KOENDERS, WILF
	Examiner	Art Unit
	Jason Prone	3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 September 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-19 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 17 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2-10, 12-16, 18, and 19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-5, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Hakkaku. In regards to claim 1, Miura discloses the invention including a coil support adapted to support a coil such that the coil may rotate about the coil axis to unroll an end portion (141 and 142), a substantially flat sheet support adapted to support the end portion (110 in Fig. 5), a cutting head mounted above the sheet support and end portion (122), a cutting head drive operative to move the cutting head back and forth along a first path parallel to the coil axis (121), a computer operative to control the cutting head (Column 1 lines 5-9), a sheet drive operatively to move the end portion forward and rearward along a second path substantially perpendicular to the coil axis (160), computer controls the coil drive and the sheet drive (Column 2 lines 57-63), and a plurality of straitening roller capable of flattening the end portion such that it lies flat on the sheet support (111 and 112 in Fig. 5).

In regards to claims 12 and 13, Miura discloses the sheet support is oriented such that there is an open space beneath the end portion under the first path (Fig. 4)

and the sheet support comprises a pair of support rollers defining the opening space there-between (111 and 113).

However, Miura fails to disclose a coil drive operable to rotate the sheet coil, the computer operates the coil drive, the computer is operative to rotate the sheet coil in a sheet advancing and a sheet retracting direction, and the computer is capable of maintaining a slack portion. Hakkaku teaches a coil drive operable to rotate the sheet coil (98), that the computer operates the coil drive (96), that the computer is operative to rotate the sheet coil in a sheet advancing and a sheet retracting direction (Fig. 3), and that the computer is capable of maintaining a slack portion (Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Miura with a computer controlled coil drive, as taught by Hakkaku, to assist the Y-direction motor by preventing any additional forces being added to the work piece that would cause damage.

3. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Hakkaku as applied to claims 1-5 above, and further in view of Ominato. Miura and Hakkaku disclose the invention but fail to disclose a measuring device operable to transmit information respecting the position of the end portion. Ominato teaches a measuring device operable to transmit information respecting the position of the end portion (11). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Miura in view of Hakkaku with a measuring device, as taught by Ominato, to prevent unwanted cutting actions.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Hakkaku further in view of Ominato as applied to claims 2 and 6 above. Miura, Hakkaku, and Ominato disclose the invention but fail to disclose that the measuring device comprises a wheel bearing including a resilient surface or a plurality of teeth. It would have been an obvious matter of design choice to make the measuring device of whatever form or shape was desired or expedient. The measuring device disclosed by Ominato is considered the equivalent to the measuring device disclosed in the present application. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Hakkaku as applied to claim 2 above, and further in view of Caraballo. Miura and Hakkaku disclose the invention but fail to disclose a first guide roller that is fixed and bears against a first edge of the end portion, a second guide roller biased against an opposite edge, a third guide roller fixed and bearing against the first edge of the end portion between the first guide roller and the coil, and a fourth guide roller biased against the second edge of the end portion between the second guide roller and the coil. Caraballo teaches a first guide roller that is fixed and bears against a first edge of the end portion (64), a second guide roller biased against an opposite edge (28), a third guide roller fixed and bearing against the first edge of the end portion between the first guide roller and the coil (66), and a fourth guide roller biased against the second edge of the end portion between the second guide roller and the coil (32). Therefore, it

would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Miura in view of Hakkaku with a measuring device, as taught by Caraballo, to keep the work piece in line.

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Hakkaku and further in view of Liefer et al. Miura discloses the invention including cutting sheet pieces from a sheet coil (150), positioning an end portion from the sheet coil to rest flat on a sheet support (110), moving a cutting head back and forth above the end portion and the sheet support along a first path parallel to the coil axis (121), and rotating the sheet metal coil so as to maintain a slack portion (151).

However, Miura fails to disclose, that sheet coil is a sheet metal coil, providing a plurality of straightening rollers to flatten the end portion, moving the end portion forward and rearward along a second path, guiding the end portion along the second path, and coordinating the movements of the cutting head and the end portion along the first and second paths with a computer. Hakkaku teaches moving the end portion forward and rearward along a second path (Fig. 3), guiding the end portion along the second path (Fig. 1), and coordinating the movements of the cutting head and the end portion along the first and second paths with a computer (96). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Miura with moving the end portion forward and rearward along a second path and coordinating this movement with the cutting head, as taught by Hakkaku, to allow for a specific cut to be made.

Liefer et al. teaches a sheet metal coil (R) and providing a plurality of straightening rollers to flatten the end portion (80). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Miura in view of Hakkaku with a metal sheet coil with flattening rollers, as taught by Liefer et al., to provide an alternate method to cut and flatten sheet metal.

Response to Arguments

7. Applicant's arguments filed 20 September 2004 have been fully considered but they are not persuasive. Claim 1 discloses a coil drive operable to rotate the coil about its axis. In Hakkaku, the motor rotates rollers 28 and 30 that grip the sheet material, which would rotate the coil about its axis. Therefore, motor 96 regardless of the fact that it is not connected to the coil still is operable to rotate it. Rollers 112 and 111 of Miura are perfectly capable of performing a flattening function on a work piece of less stiffness than metal.

Conclusion

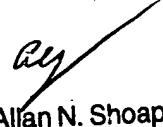
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JP
April 25, 2005


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